Amendments to the Claims:

Please amend the claims to read as follows:

1	1.	(Currently amended) A method for routing a packet comprising:
2		dedicating a separate routing table to each domain of a plurality of
3		domains for use in routing packets propagating that domain;
4		receiving the packet from one of a the plurality of domains through
5		one of a plurality of interfaces; and
6		determining one of a plurality of the routing tables for the packet
7		according to a mapping array, the mapping array including pointers that
8		associate the interfaces with the routing tables.
1	2.	(original) The method of claim 1 further comprising executing a single IP stack to receive the packet and determine the one routing table.
1	3.	(original) The method of claim 1 wherein the mapping array associates
2		interfaces connecting to the same address domain with the same routing
3		table.
1	4.	(original) The method of claim 1 further comprising, after the one routing
2		table is determined, forwarding the packet according to the one routing
j.		table if the packet is a data packet.

Amendment and Response NOR-099 U.S.S.N. 10/040,975 Page 4

1	5.	(original) The method of claim 1 further comprising, after the one routing			
2		table is determined, updating the one routing table if the packet is a			
3		route update packet.			
1	6.	(original) The method of claim 1 wherein each of the plurality of address			
2		domains represents a virtual private network.			
1	7.	(Currently amended) A router comprising:			
2		a plurality of separate routing tables, each routing table being			
3		dedicated to one of a plurality of address domains for use in routing			
. 4		packets propagating that address domain;			
. 5		interfaces through which packets from the address domains are			
6		received; and			
7		a domain manager, which includes a mapping array for			
8		determining one of a plurality of the routing tables for the received			
9		packets, the mapping array including pointers that associate the			
10		interfaces with the routing tables.			
1	8.	(original) The router of claim 7 wherein the domain manager executes			
2		a single İP stack to receive the packet and determine the one routing			
3		table.			

1	9.	(original)	A router of claim 7 wherein the mapping array associates			
2		interfaces connecting to the same address domain with the same routing				
3		table.				
1	10.	(original)	The router of claim 7 wherein the domain manager forwards			
2		the packet a	according to the determined one routing table if the packet is			
3		a data packet.				
1	11.	(original)	The router of claim 7 wherein the domain manager updates			
2		the determin	ned one routing table if the packet is a route update packet.			
1	12.	(original)	The router of claim 7 wherein each of the plurality of address			
2		domains rep	presents a virtual private network.			
1	13.	(original)	A computer program product residing on a computer			
2		readable me	edium comprising instructions for causing the computer to:			
3		dedica	ate a separate routing table to each domain of the plurality of			
4		domains for	use in routing packets propagating that domain;			
5		receiv	e the packet from one of a plurality of address domains			
6		through one	of a plurality of interfaces; and			
7		deterr	nine one of a plurality of <u>the</u> routing table <u>s</u> for the packet			
8		according to	a mapping array, the mapping array including pointers that			
9		associate the	e interfaces with the routing tables.			

- 1 14. (original) The computer program product of claim 13 further
- 2 comprising instructions for causing the computer to execute a single IP
- 3 stack to receive the packet and determine the one routing table.
- 1 15. (original) The computer program product of claim 13 wherein the
- 2 mapping array associates interfaces connecting to the same address
- domain with the same routing table.
- 1 16. (original) The computer program product of claim 13 further
- 2 comprising instructions for causing the computer to, after the one
- routing table is determined, forward the packet according to the one
- 4 routing table if the packet is a data packet.
- 1 17. (original) The computer program product of claim 13 further
- 2 comprising instructions for causing the computer to, after the one
- 3 routing table is determined, update the one routing table if the packet is
- 4 a route update packet.
- 1 18. (original) The computer program product of 13 wherein each of the
- 2 plurality of address domains represents a virtual private network.

Amendment and Response NOR-099 U.S.S.N. 10/040,975 Page 7

1	19.	(new) A method for routing a packet, comprising:
2		dedicating a separate routing table to each address domain of a
3		plurality of address domains;
4		connecting at least one interface to each address domain of the
5		plurality of address domains;
6		associating each interface with one of the separate routing tables;
7		receiving the packet from a given one of the plurality of address
8		domains through a given one of the plurality of interfaces; and
. 9		associating the packet with the given interface through which the
·10		packet is received; and
-11		selecting one of the separate routing tables for routing the packet
12		based on the given interface with which the packet is associated.
1	20.	(new) The method of claim 19, wherein the step of associating the packet
2	20.	
		with the given interface includes inserting an identifier of the given
3		interface into the packet.